APPENDIX A

SYMBOLS AND NOTATIONS

BDM = Basic Design Manual
C_b = base shear coefficient. Equivalent to ZIKCS coefficient in BDM, equation 3-1
D or DL = dead load
DMRSF = ductile moment resistant space frame as defined in BDM chapter 3
d_N = lateral displacement at level N
E or EQ = earthquake load
EQ-I = earthquake that has a 50-percent probability of being exceeded in 50 years
EQ-II = earthquake that has a 10-percent probability of being exceeded in 100 years
g = acceleration due to gravity
L or LL = live load
L/r or l/r = ratio of length (L or 1) to radius of gyration (r)
N = number of stories above the base to level n
n = the level that is uppermost in the main portion of the structure (generally the roof)
PF_N = modal roof participation factor shown in table 4-1 (Refer to SDG 4-1)
PGA = peak ground acceleration
RSAP = Rapid Seismic Analysis Procedure summarized in appendix D
RSS = root-sum-squares, same as SRSS
S_a = response spectrum value for spectral acceleration, as a ratio of the acceleration of gravity (g)
S_d = response spectrum value for spectral displacement
S_v = response spectrum value for spectral velocity
SDG = Seismic Design Guidelines
SRSS = square-root-of-the-sum-of-the-squares
S_1,S_2,S_3 = soil types for developing ATC-3-06 response spectra (NBS 510)
t = time in seconds
T = fundamental period of vibration of the structure
T_a = period of vibration of equipment or architectural appendage
V = total lateral force
W = weight of a system or building
W_p = weight of a portion of a structure, equipment, or architectural appendage
w_x = weight at or assigned to level x
α = modal base shear participation ratio for fundamental mode as shown in table 4-1 (Refer to SDG eq 4-2)
δN = same as d_N